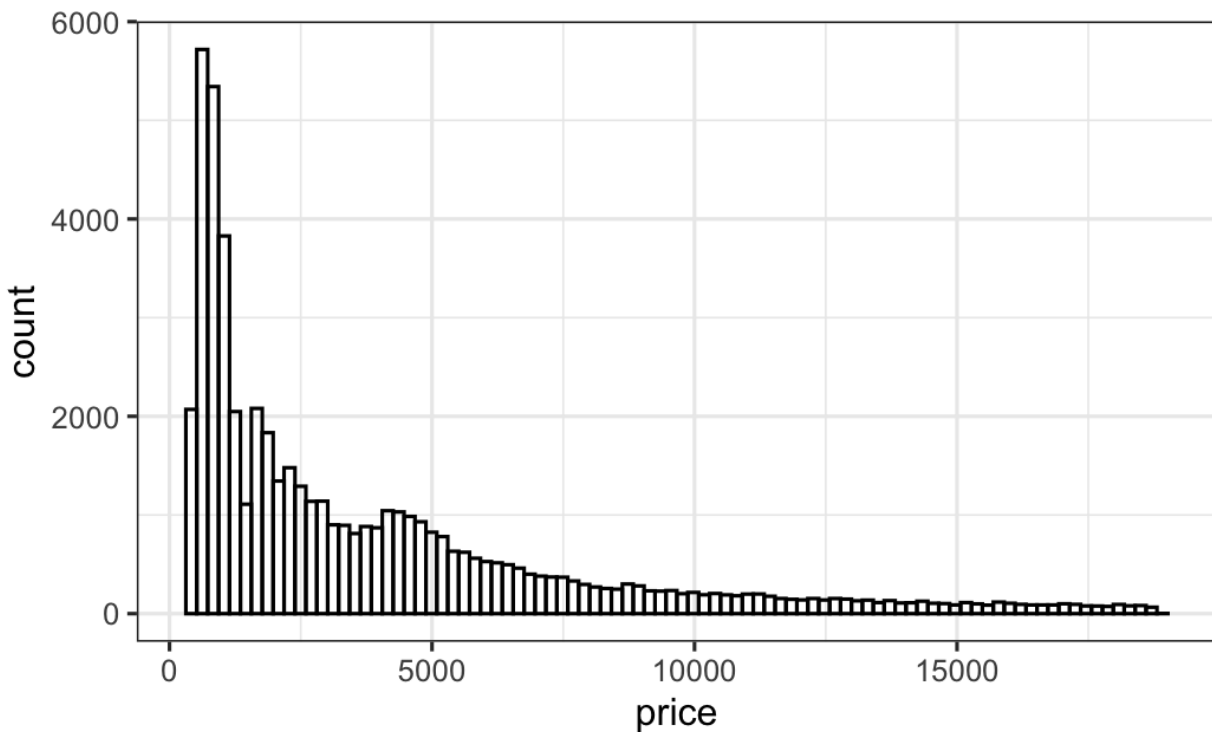# Histogram

```
data(diamonds)
ggplot(data = diamonds,
mapping = aes(x = price)) +
geom_histogram(bins=90, fill=NA,
color="black")

#add binwidth = smth for fixing binwidth
```

# Distribution of one variable

data(diamonds)

ggplot(data = diamonds,
mapping = aes(x = price)) + geom_histogram(bins=90, fill="NA", color="black")

*color changes the color of the border, fill changes the color of the inside

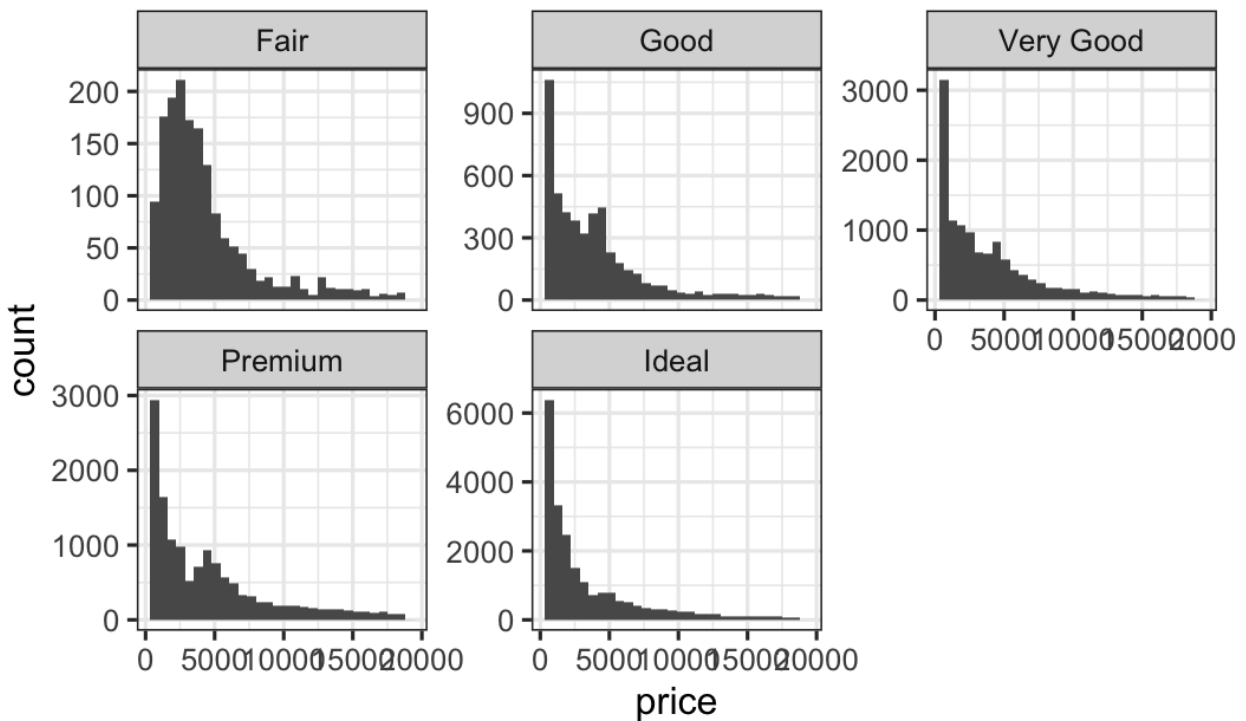Bins changes the number of bins

---

Multipanel Histograms that display price distribution based on cut (both x and y axis fixed)

```
ggplot(diamonds,
        aes(x=price)) +
    geom_histogram() +
    facet_grid(cut~.)
```
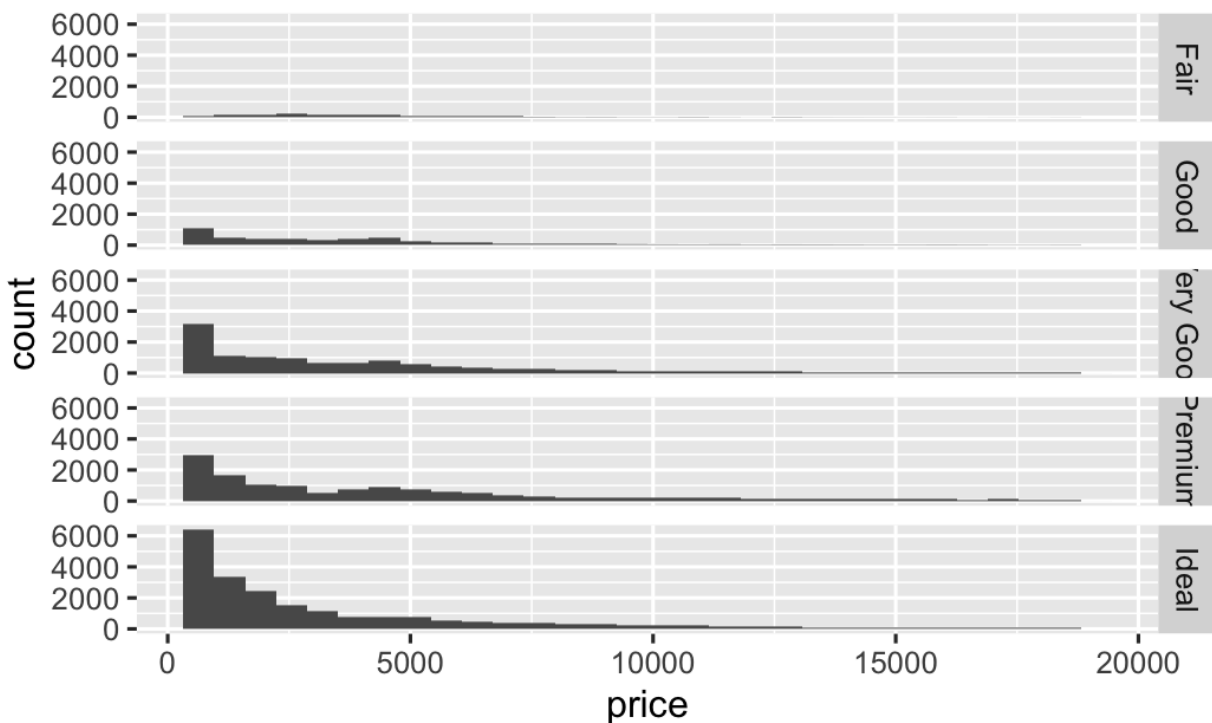
Multipanel Histograms that display price distribution based on cut (x axis fixed, y is free)

```
ggplot(diamonds,
        aes(x=price)) +
  geom_histogram() +
  facet_grid(cut~., scales="free y")
```


Different Colors Based on Diamond Cut

```
ggplot(diamonds,
        aes(x=price, fill=cut)) +
```

```
geom_histogram() +
facet_grid(cut~.)
```